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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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	Application No.	Applicant(s)
Office Action Summary	09/675,033	BIRMINGHAM, BLAIR B.A.
	Examiner	Art Unit
	Haresh Patel	2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>02 May 2007</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-46</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-46</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-46 are subject to examination.

Response to Arguments

2.   Applicant's clarification in the remarks dated 5/2/2007 **regarding the claimed invention**

is noted. Applicant's statements, "Applicant respectfully submits that **operating systems** can in

fact be executed **concurrently**" (emphasis added), with respect to claims 1, 18 and 26;

"**operating system** is typically executed **at a processor**" (emphasis added), with respect to claim

26; "Applicant respectfully submits that **one skilled in the art** would know that there are a

number of ways that an operating system can **control an appliance**" (emphasis added), with

respect to claims 1, 7, 18 and 26; "The general purpose information handling system can use an

appliance operating system to control an appliance and use **other operating systems to perform**

other tasks and **therefore be a general purpose system**"(emphasis added), with respect to

claim 18;

3.   For further clarification, regarding the broadly claimed invention, one skilled in the art at

the time of the invention very well knows that "**an operating system that controls general**

purpose computing tasks" is the inherent property of the operating system, as the **operating**

system by itself is the collection of software that directs a computer's operations, controlling

and scheduling the execution of other programs, and managing storage, input/output, and

communication resources. It is the software designed to control the hardware of a **specific**

data-processing system in order to allow users and application programs to make use of it.

The operating system is a software that controls the **execution of computer programs.**

The operating system is a software designed to handle basic elements of computer operation, such as sending instructions to hardware devices like <u>disk drives and computer screens</u>, and <u>allocating system resources such as memory</u> to different software applications being run. Note: both the claimed "appliance operating system" and "general operating system" are <u>operating systems</u> and not applications. Further, Appliance is an instrument, apparatus, or device for a particular purpose or use.

The specification of this application, provided by the applicant, under prosecution <u>also</u> very clearly states, "the present invention is not intended to be limited to the specific form set forth herein, but on the contrary, it is intended to cover such alternatives, modifications, and equivalents, as can be reasonably included within the spirit and scope of the invention. The preceding detailed description is, therefore, not to be taken in a limiting sense, and the scope of the present invention is defined only by the appended claims.

Claim Objections

4.   Following claims are objected to because of the following informalities:

Claim 1 mentions, "systems at least", which should be --systems in at least--

Claim 18 mentions, "tangibly embodying", which should be --embodying--

Claim 18 mentions, "on a general purpose", which should be --in a general purpose--

Claim 26 mentions, "on a single information", which should be --in a single information-

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Claim 26 mentions, "on the single information", which should be --in the single

information--

Claim 29 mentions, "on a memory", which should be --in a memory--

Claim 32 mentions, "on a memory", which should be --in a memory--

Claim 35 mentions, "on a memory", which should be --in a memory--

Claim 38 mentions, "on a memory", which should be --in a memory--

Appropriate correction is required.

Claim Rejections - 35 USC § 101

5.   Applicant's clarification in the remarks dated 5/2/2007 regarding the "computer readable

medium"; i.e., the "computer readable medium" being such a memory device may be read-only

memory device, random access memory device, magnetic tape memory, floppy disk memory,

hard drive memory, external tape, and/or any device that stores digital information" is noted and

hence the 101 rejections of the prior office action is withdrawn.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
subject matter, which the applicant regards as his invention.

6.   Claims 1-46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention.

Claim 7 recites the limitations, "to be". These limitations are indefinite for failing to

particularly point out and distinctly claim the subject matter in the claim.

Claim 7 recites the limitations, "capable of". These limitations are indefinite for failing

to particularly point out and distinctly claim the subject matter in the claim.

Claim11 recites the limitations, "to be". These limitations are indefinite for failing to

particularly point out and distinctly claim the subject matter in the claim.

Claim12 recites the limitations, "to be". These limitations are indefinite for failing to

particularly point out and distinctly claim the subject matter in the claim.

Claims 1 and its dependent claims recite the limitations, "an appliance operating system

dedicated to control the information handling device to operate a subset of the one or more

appliances". These limitations are indefinite for failing to particularly point out and distinctly

claim the subject matter in the claim. It is not apparent how the appliance operating system is

dedicated; when it is used for multiple functions, please refer to the arguments section. Similar

applies to claims 18 and its dependent claims. Similar applies to claims 26 and its dependent

claims. Similar applies to claims 7 and its dependent claims.

The term "general operating system" in claims 1 and dependent claims is a relative term,

which renders the claim indefinite. It is not apparent what is considered as "general" as the

specification of this application under prosecution clearly states, "while **a general operating**

system would be limited to controlling the built in CD player", (note: the prior office

action contained this explanation prior to the remarks 5/2/2007) please refer to the arguments section. Similar applies to claims 18 and its dependent claims. Similar applies to claims 26 and its dependent claims. Similar applies to claims 7 and its dependent claims.

The term "general information handling tasks" in claims 1 and dependent claims is a relative term, which renders the claim indefinite. It is not apparent what is considered as "**general information handling tasks**" as the specification of this application under prosecution **clearly states**, "while **a general operating system would be limited to controlling the built in CD player**", which in fact is similar to the tasks handled by the appliance operating system because the CD player is an appliance too, also please refer to the arguments section. Similar applies to claims 18 and its dependent claims. Similar applies to claims 26 and its dependent claims. Similar applies to claims 7 and its dependent claims.

Claims 4 recite the limitations, "executing ... operating systems concurrently" (along with general operating system performing general information handling tasks) (and the appliance operating not performing the general information handling tasks). These limitations are indefinite for failing to particularly point out and distinctly claim the subject matter in the claim. It is not apparent **how the general operating system can perform general information tasks when the other appliance operating system is executing** (during the switching period) as one of ordinary skilled in the art at the time of the invention very well knows that the general operating is waiting to be executed in the concurrent processing (during the switching period). When the appliance operating system(s) have their turn the **general operating system cannot do anything when the appliance operating system have their turn** and the general operating system cannot perform any general tasks that are general and needed for the device when the appliance operating

system(s) <u>have their turn</u>. Similar applies to claim 22. Similar applies to claims 26 and its dependent claims.

Applicant's statement, "Applicant respectfully points out that the Office Action provides no support for this assertion. One skilled in the art would understand that **<u>operating systems</u>** can be executed **<u>concurrently using a variety of techniques</u>**. Accordingly, claims 4, 22, and 26 comply with the second paragraph of Section 112" (emphasis added), is noted. The examiner agrees with the applicant that the variety of techniques are well known that support concurrently executing operating systems, however the applicant failed to support how the claimed invention, and which technique in the specification, supports **<u>how the general operating system can perform general information tasks when the other appliance operating system is executing at its turn and when the execution of the general operating system is discontinued</u>**. In fact see claimed invention, claim 2, "**discontinuing execution of one operating system prior to executing another operating system**". When the general operating system is discontinued, how the general information tasks would be handled considering the applicant's remarks that the appliance operating system is dedicated to appliance only.

Double Patenting

7.   The claims 1-46 are provisionally rejected on the ground of non-statutory double patenting over claims 1-64 of copending Application Number 10/869,165, please office action dated 3/24/2006.

Claim Rejections - 35 USC § 103

8.   Claims 1-4, 6, 11-14, 16-27, 41-43, are rejected under 35 U.S.C. 103(a) as being

unpatentable over Solomon, LSI Logic Corporation, 6,269,409 (Hereinafter Solomon-LSI) in

view of Watanabe et al., 6,763,458, Captaris Inc (Hereinafter Watanabe-Captaris).

9.   As per claim 1, Solomon-LSI clearly teaches a method comprising:

storing a plurality of operating systems (e.g., figure 3, col., 3) at least one memory of a

single information handling device (e.g., col., 3), the plurality of operating systems including an

appliance operating system to control the information handling device (e.g., col. 4) to operate an

appliances (e.g., col., 4), and a general operating system to perform general information handling

tasks (e.g., col., 4);

executing the appliance operating system to control the appliance (e.g., col. 4), wherein

the appliance operating system is independent of the general operating system (e.g., col., 3) and

executing the general operating system to control the information handling device to perform

general information handling tasks (e.g., col., 4).

However, Solomon-LSI does not specifically mention about using dedicated software.

Watanabe-Captaris discloses the well-known concept of using dedicated software, e.g.,

figures 9A, 9B and 14.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Solomon-LSI with the teachings of Watanabe-Captaris in

order to facilitate usage of the dedicated software because the well-known use of dedicated

software would support providing functionality for dedicated purpose. The dedicated software

would carry out the dedicated task. The system having the appliance operating system would get

the benefit of well-known concept of utilizing dedicated software for dedicated job.

10.   As per claim 2, Solomon-LSI and Watanabe-Captaris disclose the claimed limitations as rejected above. Solomon-LSI also teaches the following:

switching between operating systems (e.g., col., 5).

11.   As per claim 3, Solomon-LSI and Watanabe-Captaris disclose the claimed limitations as rejected above. Solomon-LSI also teaches the following:

switching includes discontinuing the execution of one operating system prior to executing another operating system (e.g., col., 6).

12.   As per claims 4, 41, Solomon-LSI and Watanabe-Captaris disclose the claimed limitations as rejected above. Solomon-LSI also teaches the following:

switching includes executing two or more of the plurality of operating systems / the appliance operating system and the general operating system, concurrently (e.g., col., 7.

13.   As per claim 6, Solomon-LSI and Watanabe-Captaris disclose the claimed limitations as rejected above. Solomon-LSI also teaches the following:

executing includes checking for resource conflicts (e.g., 6).

14.   As per claims 11-14, 16-27, Solomon-LSI and Watanabe-Captaris disclose the claimed limitations as rejected above. Solomon-LSI also teaches the following:

one or more appliances to be coupled to said at least one communications interface (e.g., col., 6),

one or more appliances are to be coupled to said communications interface via a network (e.g., col., 5),

one or more appliances are media handling systems (e.g., col., 5),

one or more media handling systems include at least one of an audio device and a visual device (e.g., col., 6),

communications interface is an interface (e.g., col., 4),

communications interface is an electrical interface (e.g., col., 3),

a resource conflict check is performed when said operating systems are executed (e.g., col., 5).

15.   As per claims 42, Solomon-LSI and Watanabe-Captaris disclose the claimed limitations as rejected above. Solomon-LSI also teaches the following:

the appliance operating system is executed between a first time and a second time subsequent to the first time (e.g., col., 6); and the general operating system is executed between a third time subsequent to the first time and a fourth time subsequent to the second time and the third time (e.g., col., 6).

16.   As per claims 43, Solomon-LSI and Watanabe-Captaris disclose the claimed limitations as rejected above. Solomon-LSI also teaches the following:

the general operating system is executed between a first time and a second time subsequent to the first time (e.g., col., 6); and the appliance operating system is executed between a third time subsequent to the first time and a fourth time subsequent to the second time and the third time (e.g., col., 6).

17.   Claims 5, 7-10, 15, 28-40, 44-46, are rejected under 35 U.S.C. 103(a) as being unpatentable over Solomon-LSI and Watanabe-Captaris in view of "Official Notice".

18.   As per claims 5, 40, Solomon-LSI and Watanabe-Captaris disclose the claimed limitations as rejected above. Solomon-LSI also teaches the following:

reading the appliance operating system from a memory circuit (e.g., col., 5), and executing the general operating system includes reading the general operating system from a mass storage device (e.g., col., 5).

However, Solomon-LSI and Watanabe-Captaris do not specifically mention about using a non-volatile / read-only memory.

"Official Notice" is taken that both the concept and advantages of providing the use of non-volatile / read-only memory is well known and expected in the art. For example, Pineau, 5,428,787, discloses storing and obtaining operating system (e.g., swapping of operating systems, col., 3, line 57 – col., 4, line 24) into/from storage devices (e.g., figure 1) including non-volatile memory (e.g., RAM, figure 1, col., 3, lines 6 - 28) read-only memory (e.g., ROM, figure 1, col., 3, lines 6 - 28), mass storage device (e.g., media disk, figure 1, col., 3, lines 29 – 34)",

"two different operating systems (e.g., optimized look ahead operating system and tag queuing

operating system, col., 3, lines 29 – 48) in different types of storage components (e.g., RAM, ROM, media disk, figure 1, col., 3, lines 6 – 34)".

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the use of non-volatile / read-only memory with the teachings of Solomon-LSI and Watanabe-Captaris in order to facilitate an appliance operating system to be stored on a non-volatile / read-only memory. The well-known use of non-volatile / read-only memory would retain the appliance operating system even when the system is powered off. The system having the appliance operating system would get the benefit of well-known non-volatile / read-only memory for storing the appliance operating system.

19.   As per claims 7 and 8, Solomon-LSI and Watanabe-Captaris disclose the claimed limitations as rejected above.

However, Solomon-LSI and Watanabe-Captaris do not specifically mention about the use of BIOS to provide initial processor control / control of which of plurality of operating systems is executed. "Official Notice" is taken that both the concept and advantages of providing the use of BIOS to provide initial processor control / control of which of plurality of operating systems is executed is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the use of BIOS to provide initial processor control / control of which of plurality of operating systems is executed with the teachings of Solomon-LSI and Watanabe-Captaris in order to facilitate initial processor control by using BIOS and to control which of plurality of operating systems is executed using BIOS. Well-known use of BIOS will help

provide boot up selection of which operating system to be selected for execution upon system startup.

20.   As per claims 9 and 10, Solomon-LSI and Watanabe-Captaris disclose the claimed limitations as rejected above.

However, Solomon-LSI and Watanabe-Captaris do not specifically mention about the details of the use of mass storage medium and read-only memory. "Official Notice" is taken that both the concept and advantages of providing the use of mass storage medium and read-only memory is well known and expected in the art. For example, Pineau, 5,428,787, discloses storing and obtaining operating system (e.g., swapping of operating systems, col., 3, line 57 – col., 4, line 24) into/from storage devices (e.g., figure 1) including non-volatile memory (e.g., RAM, figure 1, col., 3, lines 6 - 28) read-only memory (e.g., ROM, figure 1, col., 3, lines 6 - 28), mass storage device (e.g., media disk, figure 1, col., 3, lines 29 – 34)", "two different operating systems (e.g., optimized look ahead operating system and tag queuing operating system, col., 3, lines 29 – 48) in different types of storage components (e.g., RAM, ROM, media disk, figure 1, col., 3, lines 6 – 34)".

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the use of mass storage medium and read-only memory with the teachings of Solomon-LSI and Watanabe-Captaris in order to facilitate multiple operating systems separate from each other. Well-known use of mass storage medium and read-only memory will help provide storage of the multiple operating systems, which can be selected by the system to be loaded and to be used for execution.

21.   As per claim 15, Solomon-LSI and Watanabe-Captaris disclose the claimed limitations as

rejected above. However, Solomon-LSI and Watanabe-Captaris do not specifically mention

about interface being wireless.

"Official Notice" is taken that both the concept and advantages of the interface being

wireless is well known and expected in the art. For example, Ginter et al., 5,910,987 discloses

these limitations, e.g., figure 7, paragraph 1828. Ginter et al., 2004/0133793 discloses these

limitations, e.g., figure 7, paragraph 1828.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to include the usage of interface being wireless with the teachings of Solomon-LSI

and Watanabe-Captaris in order to facilitate usage of wireless functionality because the well-

known use of wireless interface would support providing communication between two devices.

Even without having physical connection between two devices the wireless interface would

communicate information from one device to another device.

22.   As per claims 28, 29 and 30, Solomon-LSI and Watanabe-Captaris disclose the claimed

limitations as rejected above. Solomon-LSI also teaches the following:

the general operating system is stored on a hard drive (e.g., col., 4).

However, Solomon-LSI and Watanabe-Captaris do not specifically mention about using a

different memory device, other than a hard drive, for storing the appliance operating system for

the DVD player.

"Official Notice" is taken that both the concept and advantages of providing and using a different memory device, other than a hard drive, for storing the appliance operating system for the DVD player is well known and expected in the art. For example, Pineau, 5,428,787, discloses storing and obtaining operating system (e.g., swapping of operating systems, col., 3, line 57 – col., 4, line 24) into/from storage devices (e.g., figure 1) including non-volatile memory (e.g., RAM, figure 1, col., 3, lines 6 - 28) read-only memory (e.g., ROM, figure 1, col., 3, lines 6 - 28), mass storage device (e.g., media disk, figure 1, col., 3, lines 29 – 34)", "two different operating systems (e.g., optimized look ahead operating system and tag queuing operating system, col., 3, lines 29 – 48) in different types of storage components (e.g., RAM, ROM, media disk, figure 1, col., 3, lines 6 – 34)".

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the use of with the teachings of Solomon-LSI and Watanabe-Captaris in order to facilitate an appliance operating system for the DVD player to be stored on a different memory device, other than a hard drive. The well-known use of different memories like, non-volatile / read-only memory, would retain the appliance operating system even when the system is powered off. The system having the appliance operating system would get the benefit of well-known different memories like, non-volatile / read-only memory for storing the appliance operating system for the DVD player.

23.   As per claims 31-39, 44-46, Solomon-LSI and Watanabe-Captaris disclose the claimed limitations as rejected above. Solomon-LSI also teaches the following:

the concept of supporting any appliance and any appliance operating system (e.g., col.,

4).

However, Solomon-LSI and Watanabe-Captaris do not specifically mention about the

appliance including a television / stereo / home security system.

"Official Notice" is taken that both the concept and advantages of providing the use of

the appliance including a television / stereo / home security system is well known and expected

in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to include the appliance including a television / stereo / home security system with the

teachings of Solomon-LSI and Watanabe-Captaris in order to facilitate the use of an appliance

operating system that handle the television / stereo / home security system functionality. The

well-known use of television / stereo / home security system appliance can be handled by using

an appliance operating system.   The system having the appliance operating system would get

the benefit of well-known use of an appliance, television / stereo / home security system,

supported by an appliance operating system.

24.   Claims 1-4, 6, 11-14, 16-28, 41-43, are rejected under 35 U.S.C. 103(a) as being

unpatentable over Endo et al. 6,615,303 (Hereinafter Endo) in view of Watanabe et al.,

6,763,458, Captaris Inc (Hereinafter Watanabe-Captaris).

25.   As per claim 1, Endo clearly teaches a method comprising:

storing a plurality of operating systems (e.g., figure 1) at least one memory of a single

information handling device (e.g., figure 1), the plurality of operating systems including an

appliance operating system to control the information handling device (e.g., col., 12, lines 1 –

28) to operate a subset of the one or more appliances (e.g., col., 9, lines 46 – 67), and a general

operating system to perform general information handling tasks (e.g., col., 9, lines 60 – 67);

executing the appliance operating system to control a subset of the one or more

appliances (e.g., col. 20, lines 31 – 36, col., 11, lines 57 – 67), wherein the appliance operating

system is independent of the general operating system (e.g., figure 1); and executing the general

operating system to control the information handling device to perform general information

handling tasks (e.g., col., 9, lines 60 – 67).

However, Endo does not specifically mention about using dedicated software.

Watanabe-Captaris discloses the well-known concept of using dedicated software, e.g.,

figures 9A, 9B and 14.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Endo with the teachings of Watanabe-Captaris in order to

facilitate usage of the dedicated software because the well-known use of dedicated software

would support providing functionality for dedicated purpose. The dedicated software would

carry out the dedicated task. The system having the appliance operating system would get the

benefit of well-known concept of utilizing dedicated software for dedicated job.

26.   As per claim 2, Endo and Watanabe-Captaris disclose the claimed limitations as rejected

above. Endo also teaches the following:

switching between operating systems (e.g., figure 14).

27.   As per claim 3, Endo and Watanabe-Captaris disclose the claimed limitations as rejected

above. Endo also teaches the following:

switching includes discontinuing the execution of one operating system prior to executing

another operating system (e.g., col., 12, lines 10 – 28).

28.   As per claims 4, 41, Endo and Watanabe-Captaris disclose the claimed limitations as

rejected above. Endo also teaches the following:

switching includes executing two or more of the plurality of operating systems / the

appliance operating system and the general operating system, concurrently (e.g., col., 20, line

65).

29.   As per claim 6, Endo and Watanabe-Captaris disclose the claimed limitations as rejected

above. Endo also teaches the following:

executing includes checking for resource conflicts (e.g., inherent functionality of an

operating system (e.g., col., 12, lines 10 – 28).

30.   As per claims 11-14, 16-27, Endo and Watanabe-Captaris disclose the claimed

limitations as rejected above. Endo also teaches the following:

one or more appliances to be coupled to said at least one communications interface (e.g.,

figure 3),

one or more appliances are to be coupled to said communications interface via a network

(e.g., use of LAN, col., 4, lines 19 – 33),

one or more appliances are media handling systems (e.g., appliance using audio/video, image display, figure 2),

one or more media handling systems include at least one of an audio device and a visual device (e.g., appliance using audio/video, image display, figure 2),

communications interface is an interface (e.g., col., 1, line 23 – col., 2, line 65),

communications interface is an electrical interface (e.g., figure 3),

a resource conflict check is performed when said operating systems are executed (e.g., col., 1, line 23 – col., 2, line 65).

31.   As per claim 28, Endo and Watanabe-Captaris disclose the claimed limitations as rejected above. Endo also teaches the following:

appliance including a DVD player (e.g., col. 20, lines 31 – 36).

32.   As per claims 42, Endo and Watanabe-Captaris disclose the claimed limitations as rejected above. Endo also teaches the following:

the appliance operating system is executed between a first time and a second time subsequent to the first time (e.g., col., 9, lines 46 – 67, figures 8-10); and the general operating system is executed between a third time subsequent to the first time and a fourth time subsequent to the second time and the third time (e.g., col., 10, lines 1-18, figures 8-10).

33.   As per claims 43, Endo and Watanabe-Captaris disclose the claimed limitations as rejected above. Endo also teaches the following:

the general operating system is executed between a first time and a second time

subsequent to the first time (e.g., col., 9, lines 46 – 67, figures 8-10); and the appliance operating

system is executed between a third time subsequent to the first time and a fourth time subsequent

to the second time and the third time (e.g., col., 10, lines 1-18, figures 8-10).

34.   Claims 5, 7-10, 15, 29-40, 44-46, are rejected under 35 U.S.C. 103(a) as being

unpatentable over Endo and Watanabe-Captaris in view of "Official Notice".

35.   As per claims 5, 40, Endo and Watanabe-Captaris disclose the claimed limitations as

rejected above. Endo also teaches the following:

        reading the appliance operating system from a memory circuit (e.g., col., 5, line 64 – col.,

6, line 10), and executing the general operating system includes reading the general operating

system from a mass storage device (e.g., figure 2).

        However, Endo and Watanabe-Captaris do not specifically mention about using a non-

volatile / read-only memory.

        "Official Notice" is taken that both the concept and advantages of providing the use of

non-volatile / read-only memory is well known and expected in the art. For example, Pineau,

5,428,787, discloses storing and obtaining operating system (e.g., swapping of operating

systems, col., 3, line 57 – col., 4, line 24) into/from storage devices (e.g., figure 1) including non-

volatile memory (e.g., RAM, figure 1, col., 3, lines 6 - 28) read-only memory (e.g., ROM, figure

1, col., 3, lines 6 - 28), mass storage device (e.g., media disk, figure 1, col., 3, lines 29 – 34)",

"two different operating systems (e.g., optimized look ahead operating system and tag queuing

operating system, col., 3, lines 29 – 48) in different types of storage components (e.g., RAM, ROM, media disk, figure 1, col., 3, lines 6 – 34)".

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the use of non-volatile / read-only memory with the teachings of Endo and Watanabe-Captaris in order to facilitate an appliance operating system to be stored on a non-volatile / read-only memory. The well-known use of non-volatile / read-only memory would retain the appliance operating system even when the system is powered off. The system having the appliance operating system would get the benefit of well-known non-volatile / read-only memory for storing the appliance operating system.

36.   As per claims 7 and 8, Endo and Watanabe-Captaris disclose the claimed limitations as rejected above.

However, Endo and Watanabe-Captaris do not specifically mention about the use of BIOS to provide initial processor control / control of which of plurality of operating systems is executed. "Official Notice" is taken that both the concept and advantages of providing the use of BIOS to provide initial processor control / control of which of plurality of operating systems is executed is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the use of BIOS to provide initial processor control / control of which of plurality of operating systems is executed with the teachings of Endo and Watanabe-Captaris in order to facilitate initial processor control by using BIOS and to control which of plurality of

operating systems is executed using BIOS. Well-known use of BIOS will help provide boot up selection of which operating system to be selected for execution upon system startup.

37.   As per claims 9 and 10, Endo and Watanabe-Captaris disclose the claimed limitations as rejected above.

However, Endo and Watanabe-Captaris do not specifically mention about the details of the use of mass storage medium and read-only memory. "Official Notice" is taken that both the concept and advantages of providing the use of mass storage medium and read-only memory is well known and expected in the art. For example, Pineau, 5,428,787, discloses storing and obtaining operating system (e.g., swapping of operating systems, col., 3, line 57 – col., 4, line 24) into/from storage devices (e.g., figure 1) including non-volatile memory (e.g., RAM, figure 1, col., 3, lines 6 - 28) read-only memory (e.g., ROM, figure 1, col., 3, lines 6 - 28), mass storage device (e.g., media disk, figure 1, col., 3, lines 29 – 34)", "two different operating systems (e.g., optimized look ahead operating system and tag queuing operating system, col., 3, lines 29 – 48) in different types of storage components (e.g., RAM, ROM, media disk, figure 1, col., 3, lines 6 – 34)".

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the use of mass storage medium and read-only memory with the teachings of Endo and Watanabe-Captaris in order to facilitate multiple operating systems separate from each other. Well-known use of mass storage medium and read-only memory will help provide storage of the multiple operating systems, which can be selected by the system to be loaded and to be used for execution.

38.   As per claim 15, Endo and Watanabe-Captaris disclose the claimed limitations as rejected

above. However, Endo and Watanabe-Captaris do not specifically mention about interface being

wireless.

"Official Notice" is taken that both the concept and advantages of the interface being

wireless is well known and expected in the art. For example, Ginter et al., 5,910,987 discloses

these limitations, e.g., figure 7, paragraph 1828. Ginter et al., 2004/0133793 discloses these

limitations, e.g., figure 7, paragraph 1828.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to include the usage of interface being wireless with the teachings of Endo and

Watanabe-Captaris in order to facilitate usage of wireless functionality because the well-known

use of wireless interface would support providing communication between two devices. Even

without having physical connection between two devices the wireless interface would

communicate information from one device to another device.

39.   As per claims 29 and 30, Endo and Watanabe-Captaris disclose the claimed limitations as

rejected above. Endo also teaches the following:

the general operating system is stored on a hard drive (e.g., figure 2).

However, Endo and Watanabe-Captaris do not specifically mention about using a

different memory device, other than a hard drive, for storing the appliance operating system for

the DVD player.

"Official Notice" is taken that both the concept and advantages of providing and using a

different memory device, other than a hard drive, for storing the appliance operating system for

the DVD player is well known and expected in the art. For example, Pineau, 5,428,787, discloses

storing and obtaining operating system (e.g., swapping of operating systems, col., 3, line 57 –

col., 4, line 24) into/from storage devices (e.g., figure 1) including non-volatile memory (e.g.,

RAM, figure 1, col., 3, lines 6 - 28) read-only memory (e.g., ROM, figure 1, col., 3, lines 6 - 28),

mass storage device (e.g., media disk, figure 1, col., 3, lines 29 – 34)", "two different operating

systems (e.g., optimized look ahead operating system and tag queuing operating system, col., 3,

lines 29 – 48) in different types of storage components (e.g., RAM, ROM, media disk, figure 1,

col., 3, lines 6 – 34)".

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to include the use of with the teachings of Endo and Watanabe-Captaris in order to

facilitate an appliance operating system for the DVD player to be stored on a different memory

device, other than a hard drive. The well-known use of different memories like, non-volatile /

read-only memory, would retain the appliance operating system even when the system is

powered off. The system having the appliance operating system would get the benefit of well-

known different memories like, non-volatile / read-only memory for storing the appliance

operating system for the DVD player.

40.   As per claims 31-39, 44-46, Endo and Watanabe-Captaris disclose the claimed

limitations as rejected above. Endo also teaches the following:

the concept of supporting any appliance and any appliance operating system (e.g., col. 20, lines 31 – 36).

However, Endo and Watanabe-Captaris do not specifically mention about the appliance including a television / stereo / home security system.

"Official Notice" is taken that both the concept and advantages of providing the use of the appliance including a television / stereo / home security system is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the appliance including a television / stereo / home security system with the teachings of Endo and Watanabe-Captaris in order to facilitate the use of an appliance operating system that handle the television / stereo / home security system functionality. The well-known use of television / stereo / home security system appliance can be handled by using an appliance operating system. The system having the appliance operating system would get the benefit of well-known use of an appliance, television / stereo / home security system, supported by an appliance operating system.

41.   Claims 1-4, 6, 11-28, 41-43, are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo et al. 6,615,303 (Hereinafter Endo) in view of Ginter et al., 6,363,488 (Hereinafter Ginter).

42.   As per claim 1, Endo clearly teaches a method comprising:

providing a plurality of operating systems (e.g., figure 1) on a single information handling device (e.g., figure 1) having one or more appliances (e.g., col. 20, lines 31 – 36, col.,

11, lines 57 – 67), the plurality of operating systems including an appliance operating system to control the information handling device (e.g., col., 12, lines 1 – 28) to operate a subset of the one or more appliances (e.g., col., 9, lines 46 – 67), and a general operating system to perform general information handling tasks (e.g., col., 9, lines 60 – 67);

executing the appliance operating system to control a subset of the one or more appliances (e.g., col. 20, lines 31 – 36, col., 11, lines 57 – 67), wherein the appliance operating system is independent of the general operating system (e.g., figure 1); and executing the general operating system to control the information handling device to perform general information handling tasks (e.g., col., 9, lines 60 – 67).

However, Endo does not specifically mention about using dedicated software.

Ginter discloses the well-known concept of using dedicated software, e.g., paragraphs 606, 654, 214.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Endo with the teachings of Ginter in order to facilitate usage of the dedicated software because the well-known use of dedicated software would support providing functionality for dedicated purpose. The dedicated software would carry out the dedicated task. The system having the appliance operating system would get the benefit of well-known concept of utilizing dedicated software for dedicated job.

43.   As per claim 2, Endo and Ginter disclose the claimed limitations as rejected above. Endo also teaches the following:

switching between operating systems (e.g., figure 14).

44.   As per claim 3, Endo and Ginter disclose the claimed limitations as rejected above. Endo also teaches the following:

switching includes discontinuing the execution of one operating system prior to executing another operating system (e.g., col., 12, lines 10 – 28).

45.   As per claims 4, 41, Endo and Ginter disclose the claimed limitations as rejected above. Endo also teaches the following:

switching includes executing two or more of the plurality of operating systems / the appliance operating system and the general operating system, concurrently (e.g., col., 20, line 65).

46.   As per claim 6, Endo and Ginter disclose the claimed limitations as rejected above. Endo also teaches the following:

executing includes checking for resource conflicts (e.g., inherent functionality of an operating system (e.g., col., 12, lines 10 – 28).

47.   As per claims 11-14, 16-27, Endo and Ginter disclose the claimed limitations as rejected above. Endo also teaches the following:

one or more appliances to be coupled to said at least one communications interface (e.g., figure 3),

one or more appliances are to be coupled to said communications interface via a network

(e.g., use of LAN, col., 4, lines 19 – 33),

one or more appliances are media handling systems (e.g., appliance using audio/video,

image display, figure 2),

one or more media handling systems include at least one of an audio device and a visual

device (e.g., appliance using audio/video, image display, figure 2),

communications interface is an interface (e.g., col., 1, line 23 – col., 2, line 65),

communications interface is an electrical interface (e.g., figure 3),

a resource conflict check is performed when said operating systems are executed (e.g.,

col., 1, line 23 – col., 2, line 65).

48.   As per claim 15, Endo and Ginter disclose the claimed limitations as rejected above.

However, Endo does not specifically mention about interface being wireless.

Ginter discloses interface being wireless, e.g., figure 7, paragraph 1828.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Endo and Ginter in order to facilitate usage of wireless

functionality because the well-known use of wireless interface would support providing

communication between two devices. Even without having physical connection between two

devices the wireless interface would communicate information from one device to another

device.

49.   As per claim 28, Endo and Ginter disclose the claimed limitations as rejected above. Endo also teaches the following:

    appliance including a DVD player (e.g., col. 20, lines 31 – 36).

50.   As per claims 42, Endo and Ginter disclose the claimed limitations as rejected above. Endo also teaches the following:

    the appliance operating system is executed between a first time and a second time subsequent to the first time (e.g., col., 9, lines 46 – 67, figures 8-10); and the general operating system is executed between a third time subsequent to the first time and a fourth time subsequent to the second time and the third time (e.g., col., 10, lines 1-18, figures 8-10).

51.   As per claims 43, Endo and Ginter disclose the claimed limitations as rejected above. Endo also teaches the following:

    the general operating system is executed between a first time and a second time subsequent to the first time (e.g., col., 9, lines 46 – 67, figures 8-10); and the appliance operating system is executed between a third time subsequent to the first time and a fourth time subsequent to the second time and the third time (e.g., col., 10, lines 1-18, figures 8-10).

52.   Claims 5, 7-10, 29-40, 44-46, are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo and Ginter in view of "Official Notice".

53.   As per claims 5, 40, Endo and Ginter disclose the claimed limitations as rejected above. Endo also teaches the following:

reading the appliance operating system from a memory circuit (e.g., col., 5, line 64 – col., 6, line 10), and executing the general operating system includes reading the general operating system from a mass storage device (e.g., figure 2).

However, Endo and Ginter do not specifically mention about using a non-volatile / read-only memory.

"Official Notice" is taken that both the concept and advantages of providing the use of non-volatile / read-only memory is well known and expected in the art. For example, Pineau, 5,428,787, discloses storing and obtaining operating system (e.g., swapping of operating systems, col., 3, line 57 – col., 4, line 24) into/from storage devices (e.g., figure 1) including non-volatile memory (e.g., RAM, figure 1, col., 3, lines 6 - 28) read-only memory (e.g., ROM, figure 1, col., 3, lines 6 - 28), mass storage device (e.g., media disk, figure 1, col., 3, lines 29 – 34)", "two different operating systems (e.g., optimized look ahead operating system and tag queuing operating system, col., 3, lines 29 – 48) in different types of storage components (e.g., RAM, ROM, media disk, figure 1, col., 3, lines 6 – 34)".

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the use of non-volatile / read-only memory with the teachings of Endo and Ginter in order to facilitate an appliance operating system to be stored on a non-volatile / read-only memory. The well-known use of non-volatile / read-only memory would retain the appliance operating system even when the system is powered off. The system having the appliance operating system would get the benefit of well-known non-volatile / read-only memory for storing the appliance operating system.

54.   As per claims 7 and 8, Endo and Ginter disclose the claimed limitations as rejected

above.

However, Endo and Ginter do not specifically mention about the use of BIOS to provide

initial processor control / control of which of plurality of operating systems is executed.

"Official Notice" is taken that both the concept and advantages of providing the use of BIOS to

provide initial processor control / control of which of plurality of operating systems is executed

is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to include the use of BIOS to provide initial processor control / control of which of

plurality of operating systems is executed with the teachings of Endo and Ginter in order to

facilitate initial processor control by using BIOS and to control which of plurality of operating

systems is executed using BIOS.   Well-known use of BIOS will help provide boot up selection

of which operating system to be selected for execution upon system startup.

55.   As per claims 9 and 10, Endo and Ginter disclose the claimed limitations as rejected

above.

However, Endo and Ginter do not specifically mention about the details of the use of

mass storage medium and read-only memory.   "Official Notice" is taken that both the concept

and advantages of providing the use of mass storage medium and read-only memory is well

known and expected in the art. For example, Pineau, 5,428,787, discloses storing and obtaining

operating system (e.g., swapping of operating systems, col., 3, line 57 – col., 4, line 24) into/from

storage devices (e.g., figure 1) including non-volatile memory (e.g., RAM, figure 1, col., 3, lines

6 - 28) read-only memory (e.g., ROM, figure 1, col., 3, lines 6 - 28), mass storage device (e.g., media disk, figure 1, col., 3, lines 29 – 34)", "two different operating systems (e.g., optimized look ahead operating system and tag queuing operating system, col., 3, lines 29 – 48) in different types of storage components (e.g., RAM, ROM, media disk, figure 1, col., 3, lines 6 – 34)".

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the use of mass storage medium and read-only memory with the teachings of Endo and Ginter in order to facilitate multiple operating systems separate from each other. Well-known use of mass storage medium and read-only memory will help provide storage of the multiple operating systems, which can be selected by the system to be loaded and to be used for execution.

56.   As per claims 29 and 30, Endo and Ginter disclose the claimed limitations as rejected above. Endo also teaches the following:

the general operating system is stored on a hard drive (e.g., figure 2).

However, Endo and Ginter do not specifically mention about using a different memory device, other than a hard drive, for storing the appliance operating system for the DVD player.

"Official Notice" is taken that both the concept and advantages of providing and using a different memory device, other than a hard drive, for storing the appliance operating system for the DVD player is well known and expected in the art. For example, Pineau, 5,428,787, discloses storing and obtaining operating system (e.g., swapping of operating systems, col., 3, line 57 – col., 4, line 24) into/from storage devices (e.g., figure 1) including non-volatile memory (e.g., RAM, figure 1, col., 3, lines 6 - 28) read-only memory (e.g., ROM, figure 1, col., 3, lines 6 - 28),

mass storage device (e.g., media disk, figure 1, col., 3, lines 29 – 34)", "two different operating systems (e.g., optimized look ahead operating system and tag queuing operating system, col., 3, lines 29 – 48) in different types of storage components (e.g., RAM, ROM, media disk, figure 1, col., 3, lines 6 – 34)".

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the use of with the teachings of Endo and Ginter in order to facilitate an appliance operating system for the DVD player to be stored on a different memory device, other than a hard drive. The well-known use of different memories like, non-volatile / read-only memory, would retain the appliance operating system even when the system is powered off. The system having the appliance operating system would get the benefit of well-known different memories like, non-volatile / read-only memory for storing the appliance operating system for the DVD player.

57.   As per claims 31-39, 44-46, Endo and Ginter disclose the claimed limitations as rejected above. Endo also teaches the following:

the concept of supporting any appliance and any appliance operating system (e.g., col. 20, lines 31 – 36).

However, Endo and Ginter do not specifically mention about the appliance including a television / stereo / home security system.

"Official Notice" is taken that both the concept and advantages of providing the use of the appliance including a television / stereo / home security system is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the appliance including a television / stereo / home security system with the teachings of Endo and Ginter in order to facilitate the use of an appliance operating system that handle the television / stereo / home security system functionality. The well-known use of television / stereo / home security system appliance can be handled by using an appliance operating system. The system having the appliance operating system would get the benefit of well-known use of an appliance, television / stereo / home security system, supported by an appliance operating system.

58.   Claims 1-4, 6, 11-14, 16-27, 41-43, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al., 6,823,458, International Business Machines Corporation (Hereinafter Lee-IBM) in view of Watanabe et al., 6,763,458, Captaris Inc (Hereinafter Watanabe-Captaris).

59.   As per claim 1, Lee-IBM clearly teaches a method comprising:

storing a plurality of operating systems (e.g., col., 3) at least one memory of a single information handling device (e.g., col., 3), the plurality of operating systems including an appliance operating system to control the information handling device (e.g., col. 4) to operate an appliances (e.g., col., 4), and a general operating system to perform general information handling tasks (e.g., col., 4);

executing the appliance operating system to control the appliance (e.g., col. 4), wherein the appliance operating system is independent of the general operating system (e.g., col., 3) and

executing the general operating system to control the information handling device to perform

general information handling tasks (e.g., col., 4).

However, Lee-IBM does not specifically mention about using dedicated software.

Watanabe-Captaris discloses the well-known concept of using dedicated software, e.g.,

figures 9A, 9B and 14.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Lee-IBM with the teachings of Watanabe-Captaris in

order to facilitate usage of the dedicated software because the well-known use of dedicated

software would support providing functionality for dedicated purpose. The dedicated software

would carry out the dedicated task. The system having the appliance operating system would get

the benefit of well-known concept of utilizing dedicated software for dedicated job.

60.   As per claim 2, Lee-IBM and Watanabe-Captaris disclose the claimed limitations as

rejected above. Lee-IBM also teaches the following:

switching between operating systems (e.g., col., 5).

61.   As per claim 3, Lee-IBM and Watanabe-Captaris disclose the claimed limitations as

rejected above. Lee-IBM also teaches the following:

switching includes discontinuing the execution of one operating system prior to executing

another operating system (e.g., col., 6).

62.   As per claims 4, 41, Lee-IBM and Watanabe-Captaris disclose the claimed limitations as rejected above. Lee-IBM also teaches the following:

switching includes executing two or more of the plurality of operating systems / the appliance operating system and the general operating system, concurrently (e.g., col., 7.

63.   As per claim 6, Lee-IBM and Watanabe-Captaris disclose the claimed limitations as rejected above. Lee-IBM also teaches the following:

executing includes checking for resource conflicts (e.g., 6).

64.   As per claims 11-14, 16-27, Lee-IBM and Watanabe-Captaris disclose the claimed limitations as rejected above. Lee-IBM also teaches the following:

one or more appliances to be coupled to said at least one communications interface (e.g., col., 6),

one or more appliances are to be coupled to said communications interface via a network (e.g., col., 5),

one or more appliances are media handling systems (e.g., col., 5),

one or more media handling systems include at least one of an audio device and a visual device (e.g., col., 6),

communications interface is an interface (e.g., col., 4),

communications interface is an electrical interface (e.g., col., 3),

a resource conflict check is performed when said operating systems are executed (e.g., col., 5).

65.   As per claims 42, Lee-IBM and Watanabe-Captaris disclose the claimed limitations as

rejected above. Lee-IBM also teaches the following:

the appliance operating system is executed between a first time and a second time

subsequent to the first time (e.g., col., 6); and the general operating system is executed between a

third time subsequent to the first time and a fourth time subsequent to the second time and the

third time (e.g., col., 6).

66.   As per claims 43, Lee-IBM and Watanabe-Captaris disclose the claimed limitations as

rejected above. Lee-IBM also teaches the following:

the general operating system is executed between a first time and a second time

subsequent to the first time (e.g., col., 6); and the appliance operating system is executed

between a third time subsequent to the first time and a fourth time subsequent to the second time

and the third time (e.g., col., 6).

67.   Claims 5, 7-10, 15, 28-40, 44-46, are rejected under 35 U.S.C. 103(a) as being

unpatentable over Lee-IBM and Watanabe-Captaris in view of "Official Notice".

68.   As per claims 5, 40, Lee-IBM and Watanabe-Captaris disclose the claimed limitations as

rejected above. Lee-IBM also teaches the following:

reading the appliance operating system from a memory circuit (e.g., col., 5), and

executing the general operating system includes reading the general operating system from a

mass storage device (e.g., col., 5).

However, Lee-IBM and Watanabe-Captaris do not specifically mention about using a non-volatile / read-only memory.

"Official Notice" is taken that both the concept and advantages of providing the use of non-volatile / read-only memory is well known and expected in the art. For example, Pineau, 5,428,787, discloses storing and obtaining operating system (e.g., swapping of operating systems, col., 3, line 57 – col., 4, line 24) into/from storage devices (e.g., figure 1) including non-volatile memory (e.g., RAM, figure 1, col., 3, lines 6 - 28) read-only memory (e.g., ROM, figure 1, col., 3, lines 6 - 28), mass storage device (e.g., media disk, figure 1, col., 3, lines 29 – 34)", "two different operating systems (e.g., optimized look ahead operating system and tag queuing operating system, col., 3, lines 29 – 48) in different types of storage components (e.g., RAM, ROM, media disk, figure 1, col., 3, lines 6 – 34)".

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the use of non-volatile / read-only memory with the teachings of Lee-IBM and Watanabe-Captaris in order to facilitate an appliance operating system to be stored on a non-volatile / read-only memory. The well-known use of non-volatile / read-only memory would retain the appliance operating system even when the system is powered off. The system having the appliance operating system would get the benefit of well-known non-volatile / read-only memory for storing the appliance operating system.

69.   As per claims 7 and 8, Lee-IBM and Watanabe-Captaris disclose the claimed limitations as rejected above.

However, Lee-IBM and Watanabe-Captaris do not specifically mention about the use of BIOS to provide initial processor control / control of which of plurality of operating systems is executed. "Official Notice" is taken that both the concept and advantages of providing the use of BIOS to provide initial processor control / control of which of plurality of operating systems is executed is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the use of BIOS to provide initial processor control / control of which of plurality of operating systems is executed with the teachings of Lee-IBM and Watanabe-Captaris in order to facilitate initial processor control by using BIOS and to control which of plurality of operating systems is executed using BIOS. Well-known use of BIOS will help provide boot up selection of which operating system to be selected for execution upon system startup.

70.   As per claims 9 and 10, Lee-IBM and Watanabe-Captaris disclose the claimed limitations as rejected above.

However, Lee-IBM and Watanabe-Captaris do not specifically mention about the details of the use of mass storage medium and read-only memory. "Official Notice" is taken that both the concept and advantages of providing the use of mass storage medium and read-only memory is well known and expected in the art. For example, Pineau, 5,428,787, discloses storing and obtaining operating system (e.g., swapping of operating systems, col., 3, line 57 – col., 4, line 24) into/from storage devices (e.g., figure 1) including non-volatile memory (e.g., RAM, figure 1, col., 3, lines 6 - 28) read-only memory (e.g., ROM, figure 1, col., 3, lines 6 - 28), mass storage device (e.g., media disk, figure 1, col., 3, lines 29 – 34)", "two different operating systems (e.g.,

optimized look ahead operating system and tag queuing operating system, col., 3, lines 29 – 48)

in different types of storage components (e.g., RAM, ROM, media disk, figure 1, col., 3, lines 6

– 34)".

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to include the use of mass storage medium and read-only memory with the teachings

of Lee-IBM and Watanabe-Captaris in order to facilitate multiple operating systems separate

from each other. Well-known use of mass storage medium and read-only memory will help

provide storage of the multiple operating systems, which can be selected by the system to be

loaded and to be used for execution.

71.   As per claim 15, Lee-IBM and Watanabe-Captaris disclose the claimed limitations as

rejected above. However, Lee-IBM and Watanabe-Captaris do not specifically mention about

interface being wireless.

"Official Notice" is taken that both the concept and advantages of the interface being

wireless is well known and expected in the art. For example, Ginter et al., 5,910,987 discloses

these limitations, e.g., figure 7, paragraph 1828. Ginter et al., 2004/0133793 discloses these

limitations, e.g., figure 7, paragraph 1828.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to include the usage of interface being wireless with the teachings of Lee-IBM and

Watanabe-Captaris in order to facilitate usage of wireless functionality because the well-known

use of wireless interface would support providing communication between two devices. Even

without having physical connection between two devices the wireless interface would

communicate information from one device to another device.

72.   As per claims 28, 29 and 30, Lee-IBM and Watanabe-Captaris disclose the claimed

limitations as rejected above. Lee-IBM also teaches the following:

        the general operating system is stored on a hard drive (e.g., col., 4).

        However, Lee-IBM and Watanabe-Captaris do not specifically mention about using a

different memory device, other than a hard drive, for storing the appliance operating system for

the DVD player.

        "Official Notice" is taken that both the concept and advantages of providing and using a

different memory device, other than a hard drive, for storing the appliance operating system for

the DVD player is well known and expected in the art. For example, Pineau, 5,428,787, discloses

storing and obtaining operating system (e.g., swapping of operating systems, col., 3, line 57 –

col., 4, line 24) into/from storage devices (e.g., figure 1) including non-volatile memory (e.g.,

RAM, figure 1, col., 3, lines 6 - 28) read-only memory (e.g., ROM, figure 1, col., 3, lines 6 - 28),

mass storage device (e.g., media disk, figure 1, col., 3, lines 29 – 34)", "two different operating

systems (e.g., optimized look ahead operating system and tag queuing operating system, col., 3,

lines 29 – 48) in different types of storage components (e.g., RAM, ROM, media disk, figure 1,

col., 3, lines 6 – 34)".

        It would have been obvious to one of ordinary skill in the art at the time the invention

was made to include the use of with the teachings of Lee-IBM and Watanabe-Captaris in order to

facilitate an appliance operating system for the DVD player to be stored on a different memory

device, other than a hard drive. The well-known use of different memories like, non-volatile /

read-only memory, would retain the appliance operating system even when the system is

powered off. The system having the appliance operating system would get the benefit of well-

known different memories like, non-volatile / read-only memory for storing the appliance

operating system for the DVD player.

73.   As per claims 31-39, 44-46, Lee-IBM and Watanabe-Captaris disclose the claimed

limitations as rejected above. Lee-IBM also teaches the following:

the concept of supporting any appliance and any appliance operating system (e.g., col.,

4).

However, Lee-IBM and Watanabe-Captaris do not specifically mention about the

appliance including a television / stereo / home security system.

"Official Notice" is taken that both the concept and advantages of providing the use of

the appliance including a television / stereo / home security system is well known and expected

in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to include the appliance including a television / stereo / home security system with the

teachings of Lee-IBM and Watanabe-Captaris in order to facilitate the use of an appliance

operating system that handle the television / stereo / home security system functionality. The

well-known use of television / stereo / home security system appliance can be handled by using

an appliance operating system. The system having the appliance operating system would get

the benefit of well-known use of an appliance, television / stereo / home security system,

supported by an appliance operating system.

Conclusion

Multiple references are used for the rejections to demonstrate that several references

disclose the broadly claimed subject matter of the claims.

The prior art made of record (forms PTO-892 and applicant provided IDS cited arts) and

not relied upon is considered pertinent to applicant's disclosure. For example, Josten et al.,

5,546,579 also discloses usage of the concurrent operating system as claimed, col., 6. Hirsch et

al., 4,722,048 also discloses usage of the concurrent operating system as claimed, col., 4. Okada

et al., IBM, 6,233,213, also discloses usage of concurrent playbacks of CD and DVD, col., 2.

Hughes, Tacit Networks, 6,854,009, also discloses usage of concurrent handling of appliance(s),
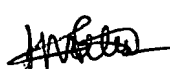
col., 16.

Examiner has cited particular columns and line numbers and/or paragraphs and/or

sections and/or page numbers in the reference(s) as applied to the claims above for the

convenience of the applicant. Although the specified citations are representative of the teachings

of the art and are applied to the specific limitations within the individual claim, other passages

and figures may apply as well. It is respectfully requested from the applicant in preparing

responses, to fully consider the references in entirety, as potentially teaching, all or part of the

claimed invention, as well as the context of the passage, as taught by the prior art or disclosed by

the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haresh Patel whose telephone number is (571) 272-3973. The examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn, can be reached at (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Haresh Patel

Haresh Patel

7/16/07